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10/680,167	10/08/2003	Yoon-Man Choi	1572.1161	5784

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EXAMINER	
LIANG, REGINA	
ART UNIT	**PAPER NUMBER**
2629	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/680,167	**Applicant(s)** CHOI, YOON-MAN
	Examiner Regina Liang	**Art Unit** 2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is response to amendment filed 9/12/05. Claims 1-26 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1, 2, 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Paratore (US 6,243,258).

As to claim 1, Paratore discloses a portable computer having a main body (lower case 14) and a display part (display unit 2) opening-rotatable (Fig. 2) and converting-rotatable (Fig. 3) relative to the main body, comprising:

a screen input part (digitizer) provided in a screen of the display part (display unit 2);

a position sensor (22a, 22b) detecting a converting rotation of the display part; and

a controller controlling the screen input part to operate if the position sensor detects that the display part is in a converting rotation zone (see Fig. 3, the computer is in a pen input mode when the upper case 2 is rotated to 180°, and the switch 22a and bracket 22b are in contacted each other).

As to claim 2, Paratore teaches the converting rotation of the display part is a rotation of the display part between a position in which the screen of the display part displaying image is toward the main body (Fig. 2) and a position in which the screen of the display part is toward an opposite direction of the main body (Fig. 3).

Claims 11, 12 are method claims corresponding to the above apparatus claims 1, 2 and are rejected for the same reasons as stated above since such method "steps" are clearly read on by the corresponding "means".

Claim Rejections - 35 USC § 103

4. Claims 3, 4, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paratore in view of Kim (US 6,105,143).

As to claims 3, 13, Paratore does not disclose the computer comprising a USB interface interconnecting the screen input part and the main body. However, Kim teaches a computer system comprising a USB interface (USB hub 10) interfacing the main body and peripheral devices. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paratore to utilize a USB interface as taught by Kim for interfacing the screen input part and the main body so as to provide a computer system of power control of peripheral devices using a USB hub, which is adapted to minimize the power consumption of the display device by supplying the power to the display device through the USB hub (col. 1, lines 20-27 of Kim).

As to claims 4, 14, Kim teaches the controller controls the USB interface to operate in a power saving mode (col. 2, lines 19-54).

5. Claims 5-10, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paratore in view Jeong (US 5,621,437).

As to claims 5, 6, 15, 16, Paratore does not disclose a first switching turning on/off power supplied to the screen input part. However, Fig. 2 of Jeong teaches a data input/output control unit having a touch panel (20) and an on/off switch (30) for controlling supplying power to the touch panel, the switch (30) is turned on the supply power to the touch panel when the touch panel is in operated, and the switch 30 is turned off when the touch panel is not operated (a power saving mode, see col. 7, lines 25-32, lines 52-56 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer of Paratore to have the first switching part connected between the controller and the screen input part for turning on/off power supplied to the screen input part as taught by Jeong so that power consumption can be minimized and a battery can be lengthened in life (col. 2, lines 26-30 of Jeong). Therefore, Paratore as modified by Jeong would have the controller turns on the first switching part if the position sensor detects the display part is converting-rotated into the converting rotation zone (a pen input mode as shown in Fig. 3 of Paratore) and turns off the first switching part if the position sensor detects the display part is out of converting rotation zone (a keyboard mode as shown in Fig. 2 of Paratore) as claimed.

As to claims 7-10, 17-20, Paratore as modified by Jeong does not disclose a second switching part turning on/off power supplied to a body input part (keyboard). However, as discussed above, Jeong teaches a input/output control unit having a switching part connecting between the input part and the controller for controlling supplying power to input part. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paratore as modified by Jeong to comprise a second switching part connected between controller and the body input part (keyboard) for turning on/off power supplied to a body input part (keyboard) since the power consumption can be further minimized and a battery life can be further lengthened. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, Paratore as modified by Jeong would have the controller turn on the second switching part if the position sensor detects that the body input part (keyboard) is uncovered (a keyboard mode as shown in Fig. 2 of Paratore) and turns off the second switching part if the position sensor detects the body input part is covered (a pen input mode as shown in Fig. 3 of Paratore) as claimed.

As to claim 21, as discussed above, Paratore as modified by Jeong supplying power to the screen input part and body input part according to rotated viewing position of the display part screen relative to the body input part or according to the detecting of the converting-rotation zone as claimed.

6. Claims 22, 23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paratore and Jeong applied to claim 21 above, and further in view Moon (US 6,275,376).

As to claim 22, Paratore as modified by Jeong does not disclose one of the rotated viewing positions of the display part screen is a swiveled position with the screen facing away from the main body. However, Figs. 1B, 1C of Moon teaches a portable computer having one of rotated viewing positions of the display part screen is a swiveled position with the screen facing away from the main body. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paratore as modified by Jeong to have one rotated viewing position of the display part screen is a swiveled position with the screen facing away from the main body as taught by Moon as to provide a personal computer which can easily display the information to more than one person without having to shift the base of the computer (col. 4, lines 2-6 of Moon).

As to claim 23, Fig. 1D of Moon teaches one of the viewing positions of the display part screen is a pad position with the display part covering the body input part and the screen exposed.

As to claim 25, Paratore teaches a position sensor detecting the viewing positions of the display part; Fig. 1D of Moon teaches the upside position lying on the keyboard, advantageously make inputting data with a stylus easy and comfortable as wiring with a pen on a book (col. 6, lines 62-64). Thus, Paratore as modified by Jeong and Moon would have the controller controlling the power supplied to the controller and the body input part according to the rotated viewing positions detected by the position sensor as claimed.

7. Claims 24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paratore, Jeong and Moon applied to claim 22 above, and further in view Kim.

As to claims 24, 26, Paratore as modified by Jeong and Moon does not disclose the computer comprising a USB interface interfacing with the controller and the screen input part. However, Kim teaches a computer system comprising a USB interface (USB hub 10) interfacing the main body (controller) and peripheral devices. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paratore as modified by

Jeong and Moon to utilize a USB interface as taught by Kim for interfacing the controller with the screen input part so as to provide a computer system of power control of peripheral devices using a USB hub, which is adapted to minimize the power consumption of the display device by supplying the power to the display device through the USB hub (col. 1, lines 20-27 of Kim).

Response to Arguments

8. Applicant's arguments filed 9/12/06 have been fully considered but they are not persuasive.

Applicant's argument regarding claims 1 and 11 in that "Paratore does not discuss controlling the screen input part when the display part is in a converting rotation zone" is not persuasive. As clearly shown in Figs. 3-5, when the computer is in pen input mode, the process enters the pen input mode for controlling the screen input part (digitizer) when the display part is in a converting rotation zone as claimed.

Applicant argues (regarding claims 1 and 11) that "Paratore makes no mention of position sensor to determine if the display part is in a converting rotation zone", which is not persuasive. Switches 22a, 22b as shown in Fig. 2 of Paratore are a position sensor for detecting a converting rotation of the display part (see col. 3, lines 43-55 for example).

Applicant argues that "the display unit of the hand held device of Paratore does not appear to be able to swivel with respect to the keyboard as recited in claims 1 and 11", which is not persuasive since applicant is reading limitation into the claims.

Applicant's argument (regarding claim 21) in that "neither Paratore nor Jeong recites computer having a display rotatable relative to a main body" is not persuasive. Fig. 2 of Paratore clearly teaches the display unit 2 is rotatable between an open and close position relative to the lower case 14, which reads on the display rotatable relative to a main body as claimed.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Regina Liang
Primary Examiner
Art Unit 2674

10/11/06